

Appellant : Joel D. Stanfield et al.
Appln. No. : 08/998,302
Page : 2

In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (previously presented) A file tracking system comprising:
 - a database for maintaining file location and unique file addresses for a plurality of files;
 - a processor for interfacing with said database and issuing control signals;
 - a bus connected to said processor;
 - a folder retainer connected to said processor by said bus; and
 - a plurality of file folders, each file folder including an addressable device adapted to be electrically connected to said bus when the file folder is placed in said folder retainer, each addressable device being responsive to a control signal including the unique address associated with the addressable device to transmit a signal back to said processor so that said processor may maintain the file location of each file in said database.
2. (previously presented) The file tracking system of claim 1, further including an indicator located on one of said file folders, wherein said addressable device includes an addressable switch and said indicator is activated when said addressable switch receives a control signal from said processor including the unique address corresponding to the file folder.
3. (previously presented) The file tracking system of claim 2, further including:
 - an input device for receiving commands and file identification information from an operator and providing the commands and file identification information to said processor,
 - wherein, when the operator inputs a command to search for a specific file, said processor accesses a unique address and file location stored in said database as corresponding to input file identification information identifying the specific file to be searched for, displays the file location, and transmits a control signal including the unique address to the addressable

Appellant : Joel D. Stanfield et al.
Appln. No. : 08/998,302
Page : 3

switch of the file folder containing the specific file causing the addressable switch to activate the indicator.

4. (currently amended) The file tracking system of claim 2, wherein said addressable switch includes:

a ROM having the unique file address stored therein;
address comparing means for comparing an address included in a control signal received from said the processor with the unique address stored in said ROM; and
state changing means for changing the state of said addressable switch when said address comparing means determines that the address included in the received control signal is the same as the unique address stored in said ROM.

5. (previously presented) The file tracking system of claim 4, wherein said addressable switch further includes a load transistor having a gate, a source, and a drain, said gate connected to said state changing means, wherein said state changing means changes the state of said addressable switch by turning on and off said load transistor.

6. (previously presented) The file tracking system of claim 5, wherein said indicator is an indicator light having a first terminal connected to said first conductor, and a second terminal connected to said source of said load transistor, wherein said drain of said load transistor is connected to said second conductor, and said indicator light is turned on when said load transistor is turned on by said state changing means.

7. (previously presented) The file tracking system of claim 1, wherein said processor includes:
polling means for periodically polling said file folders to determine the presence and location of each file folder;

Appellant : Joel D. Stanfield et al.
Appln. N^o. : 08/998,302
Page : 4

means for updating said database when said polling means determines that a file location is different from the location previously stored or that a file that said database previously indicated as present is no longer present.

8. (previously presented) The file tracking system of claim 1, wherein said processor is a personal computer.

9. (previously presented) The file tracking system of claim 1, wherein said processor is any one of a plurality of computers connected to a local area network.

10. (previously presented) The file tracking system of claim 9, wherein said database is a distributed database accessible by any one of said plurality of computers.

11. (currently amended) The file tracking system of claim 1, wherein each of said file folders further ~~include~~ includes:

a surface;

a first conductor on said surface for providing control signals to said addressable device when the file folder is placed in said folder retainer; and

a second conductor on said surface for providing a ground to said addressable device.

12. (currently amended) The file tracking system of claim 1, wherein said folder retainer includes:

at least one surface;

a first conductive rail positioned on said surface for providing power and control signals to the addressable devices positioned on said plurality of file folders when said file folders are placed in said folder retainer; and

a second conductive rail positioned on said surface for providing a ground to the addressable devices when said plurality of file folders ~~are~~ is placed in said folder retainer.

13. (currently amended) The file tracking system of claim 12, wherein at least one of said first and second conductive rails ~~are~~is integrated into a suspension rail of a file drawer upon which hanging file folders may be suspended.

14. (currently amended) The file tracking system of claim 12, wherein said folder retainer includes a plurality of shelves, and at least one of said first and second conductive rails ~~are~~is located on at least one of said shelves.

15. (currently amended) The file tracking system of claim 12, wherein said folder retainer is a file tray, wherein at least one of said first and second conductors ~~are~~is positioned in said file tray.

16. (currently amended) The file tracking system of claim 12, wherein said surface is an interior surface of a file drawer for use in a file cabinet, wherein at least one of said first and second conductive rails ~~are~~is positioned in said file drawer.

17. (currently amended) The file tracking system of claim 16, wherein at least one of said first and second conductive rails ~~are~~is positioned along a bottom of said file drawer.

18. (currently amended) The file tracking system of claim 16, wherein at least one of said first and second conductors ~~are~~is positioned along a side of said file drawer.

19. (previously presented) A file tracking system comprising:

- a database for maintaining file location and unique file addresses for a plurality of files;
- a processor for interfacing with said database and issuing control signals;
- a bus connected to said processor;

an input device for receiving commands and file identification information from an operator and providing the commands and file identification information to said processor;

a plurality of folder retainers each connected to said bus via an addressable switch having a unique address, and each including an indicator for indicating the presence of a searched for file folder that is located therein; and

a plurality of file folders, each file folder including an addressable switch adapted to be electrically connected to said bus when the file folder is placed in said folder retainer, and each including an indicator that is activated when said addressable switch receives a control signal from said processor including the unique address corresponding to the file folder,

wherein, when the operator inputs a command to search for a specific file, said processor

identifies a first unique address and file location stored in said database as corresponding to input file identification information identifying the specific file to be searched for,

displays the file location,

identifies a second unique address in said database for the addressable switch of the folder retainer in which the searched for file folder is located,

transmits a control signal that energizes a segment of said bus within the folder retainer corresponding to the searched for file,

transmits a control signal including the second unique address to the addressable switch of the folder retainer causing the indicator of the folder retainer to activate, and

transmits a control signal including the first unique address to the addressable switch of the file folder containing the specific file causing the addressable switch to activate the indicator located on the file folder.

20. (currently amended) A file tracking system comprising:

a database for maintaining file location and unique file folder address for a plurality of files, and a unique drawer address of each file drawer in which the files are located;

a processor for interfacing with said database and issuing control signals;

a bus connected to said processor;

a plurality of file cabinets, connected to said processor by said bus, each of said file cabinets including a plurality of file drawers, each file drawer having:

an outer face,

an addressable drawer indicator switch including a unique drawer address,

a drawer indicator light connected to said addressable drawer indicator switch and located on said outer face of the file drawer,

a first conductive rail connected to said bus for receiving control signals from said processor, and

a second conductive rail for providing a ground,

wherein said addressable drawer indicator switch illuminates said drawer indicator light when said addressable drawer indicator switch receives a control signal from said processor including the unique drawer address corresponding to the file drawer; and

a plurality of file folders, each file folder including an addressable folder indicator switch and a folder indicator light, wherein said addressable folder indicator switch is connected to said first and second conductive rails when the file folder is placed in one of said file drawers, and said folder indicator light is illuminated when said addressable folder indicator switch receives a control signal from said processor including the unique folder address corresponding to the file folder.

21. (previously presented) The file tracking system of claim 20, wherein said database additionally maintains a unique cabinet address, and said file cabinets each further include an

addressable cabinet indicator switch connected to said bus and having a unique cabinet indicator address, and a cabinet indicator light connected to said addressable cabinet indicator switch, wherein said addressable cabinet indicator switch illuminates said cabinet indicator light when said addressable cabinet indicator switch receives a control signal from said processor including the unique cabinet indicator address corresponding to the file cabinet.

22. (previously presented) The file tracking system of claim 20, wherein said first conductive rail provides power to said addressable folder indicator switches and said addressable drawer indicator switches.

23. (previously presented) A method of locating a file comprising the steps of:

inputting information identifying the file to be located;

accessing a database to determine a present location of the file, a unique identification code associated with a receiver at the present location of the file, and a unique identification code associated with the file;

transmitting a first control signal to the receiver at the present location of the file, the first control signal including the unique identification code of the receiver, transmitting a second control signal to the file, the second control signal including the unique identification code of the file; and

activating an annunciator in response to receipt of one of the first and second control signals.

24. (previously presented) The method of claim 23, wherein the annunciator is located on the file.

25. (previously presented) The method of claim 23, wherein the annunciator is located on the receiver.

26. (previously presented) The method of claim 23, wherein the annunciator is an indicator light.

27. (previously presented) The method of claim 26, wherein said indicator light is located on the file and wherein the method further includes the step of illuminating a second indicator light on the receiver in response to receipt of the first control signal at the receiver.

28. (previously presented) A method of locating a file comprising the steps of:

inputting information identifying the file to be located;

accessing a database to determine a present location of the file, a unique identification code associated with a folder retainer in which the file is located, and a unique identification code associated with the file;

transmitting a control signal to the file, the control signal including the unique identification code of the file and the unique identification code of the folder retainer; and

illuminating an indicator light on the file in response to receipt of the control signal at the file.

29. (previously presented) The method of claim 28, further including the step of illuminating a second indicator light on the folder retainer in response to receipt of the control signal at the folder retainer.

30. (previously presented) A file locating system comprising:

a database for maintaining file location and unique file addresses for a plurality of files;

a processor for interfacing with said database and issuing control signals;

a bus connected to said processor;

a folder retainer, connected to said processor by said bus;

a plurality of file folders, each file folder including an addressable switch connected to said bus when the file folder is placed in said folder retainer;

Appellant : Joel D. Stanfield et al.
Appln. No. : 08/998,302
Page : 10

a file locating device adapted to aid in the location of a file folder in response to control signals issued by said controller; and

a conductor provided in said folder retainer and coupled to said bus, for establishing a common communication path along which said control signals issued from said processor are transferred to the addressable switches of at least two of said file folders.

31. (previously presented) The file locating system of claim 30, wherein said file locating device is an indicator light located on the file folder.

32. (previously presented) The file locating system of claim 30, further including:

input means for inputting information identifying the file folder to be located, wherein said processor accesses said database to determine a present location of the identified file folder, a unique identification code associated with a folder retainer in which the file folder is presently located, and a unique identification code associated with the file folder,

said processor transmits a control signal to the folder retainer in which the file folder is located, the control signal including the unique identification code of the file folder and the unique identification code of the folder retainer, and

said file locating device includes an annunciator activatable in response to receipt of the control signal, said annunciator being located on said folder retainer.

33. (previously presented) The file locating system of claim 32, wherein said annunciator is an indicator light.

34-52. Canceled

53. (previously presented) A file tracking system comprising:

a processor for issuing control signals;

a folder retainer having electrical contacts communicatively coupled to said processor;
and

a plurality of file folders, each file folder including an addressable device connected to conductive contacts provided on an exterior surface of the file folder and adapted to be electrically coupled to said contacts of said folder retainer,

wherein said folder retainer is configured to support file folders that are stacked vertically upon one another such that each addressable device on each file folder in a vertical stack supported by said folder retainer, is coupled to said electrical contacts of said folder retainer through the conductive contacts provided on file folders therebelow.

54. (previously presented) A file tracking system comprising:

a processor for issuing control signals;

a plurality of folder retainers communicatively coupled to said processor, wherein at least one of said folder retainers is configured to support file folders in an orientation different than that in which another folder retainer supports file folders; and

a plurality of file folders, each file folder including an addressable device adapted to be communicatively coupled to said processor when the file folder is placed in any one of said folder retainers.

55. (previously presented) The file tracking system of claim 54, wherein said at least one folder retainer is configured to support hanging file folders.

56. (previously presented) The file tracking system of claim 55, wherein said at least one folder retainer is a file cabinet drawer.

57. (previously presented) The file tracking system of claim 54, wherein said at least one folder retainer is configured to support file folders stacked vertically on top of one another.

Appellant : Joel D. Stanfield et al.
Appln. No. : 08/998,302
Page : 12

58. (previously presented) The file tracking system of claim 57, wherein said at least one folder retainer is a file tray.

59. (previously presented) The file tracking system of claim 54, wherein said at least one folder retainer is configured to support file folders that horizontally abut one another.

60. (previously presented) The file tracking system of claim 59, wherein said at least one folder retainer is a shelf.

61. (previously presented) The file tracking system of claim 54, wherein at least one of said folder retainers is communicatively coupled to said processor by an RF link.

62. (previously presented) The file tracking system of claim 54, wherein at least one of said folder retainers is communicatively coupled to said processor by a bus.

63. (previously presented) A file tracking system comprising:

- a database for maintaining file identity, file location, and unique file addresses for a plurality of files;

- a processor for interfacing with said database and issuing control signals;

- a bus connected to said processor;

- a plurality of folder retainers connected to said processor by said bus, wherein at least one of said folder retainers is configured to support file folders in an orientation different than that in which another folder retainer supports file folders; and

- a plurality of file folders, each file folder including an addressable device adapted to be electrically connected to said bus when the file folder is placed in any one of said folder retainers.

Appellant : Joel D. Stanfield et al.
Appln. No. : 08/998,302
Page : 13

64. (New) The method of claim 23, wherein the first and second control signals are transmitted over a communication link, and at least a portion of the communication link is wireless.

65. (New) The method of claim 64, wherein the receiver is a wireless receiver located on a folder retainer in which the file is located.

66. (New) The method of claim 64, wherein the receiver is a wireless receiver located on the file.

67. (New) The method of claim 28, wherein the control signal is transmitted over a communication link, and at least a portion of the communication link is wireless.

68. (New) The method of claim 67, wherein a wireless receiver is provided on the folder retainer for receiving the control signal.

69. (New) The method of claim 67, wherein a wireless receiver is provided on the file for receiving the control signal.

70. (New) The file tracking system of claim 54, wherein the addressable device of at least one of said file folders is communicatively coupled to said processor through a communication link, and at least a portion of the communication link is wireless.

71. (New) The file tracking system of claim 70, wherein the communication link includes a wireless portion between said processor and a folder retainer in which the at least one file folder is located.

Appellant : Joel D. Stanfield et al.
Appln. No. : 08/998,302
Page : 14

72. (New) The file tracking system of claim 70, wherein the communication link between said processor and the at least one file folder is located is wireless.